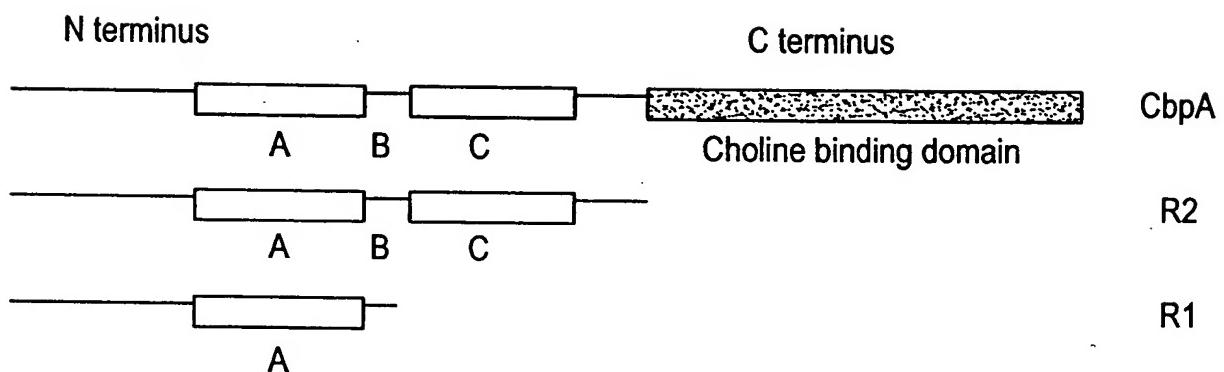




FIG. 1





# FIG. 2A-1

	- AVASLVMGSVVHATENEVTTQVATSSNRANESOTEHRKAAKQ -			- VDEYIKKML --- O -- L			
	10	20	30	40	50	60	
SPB328 (23F)	CbpA	-AVASLVMGSVVHATEKEVTTQVATSSNKANKSOTEHMKAAKQ-----			-VDEYIKKKL --- O -- L	53	
SPB365 (23F)	CbpA	-AVASLVMGSVVHATEKEVTTQVATSSNRANKSOTEHMKAAKQ-----			-VDEYIKKKL --- O -- L	53	
SPB105 (6B)	CbpA	VAVASLVMGSVVHATEKEVTTQVATSSNRANEQAAGRKAEEQF-----			-DEYIKTM -----	54	
SPSJ12 (19A)	CbpA	-AVASLVMGSVVHATEENEGTTOQAPTSSNRGNESQAEHMKAAKQ-----			-VDEYEKML -----	53	
SPB331 (14)	CbpA	-VASLVMGSVVHATEKEVTTQVATSSNKANKSOTEHMKAAKQ-----			-VDEYIKKKL --- O -- L	52	
SPR332 (9V)	CbpA	CTVASLVMGSVVHATENERTTQVPTSSNRGK -- PERRKAAEOF-----			-DEYINKMI --- O -- L	51	
ATCC2	CbpA	trunc VAVASLVMGSVVHATEKEVTTQVPTYSNMAK -- TEHRKAAKQV-----			-VDEYEKMLREIQ---	55	
R6X (2)	CbpA	trun ----- ENEGSTQAATSSNMMAK -- TEHRKAAKQV-----			-VDEYEKMLREIQ---	40	
SPSJ9 (14)	CbpA	t Y-1ASLFLGGVVHAE --- GVRSENNPTVTSSGQDISKKYADE-----			VKSHELKILSEIQTNL	54	
ATCC6B	CbpA	trun --- ASLFLGGVVHAE --- GVRSGNNSTVTSSGODISKKYADE-----			-VESHLQSILKDYNKNL	52	
Ntype4	CbpA	trun CIVASLVMGSVVHATENEGATQVPTSSNRANESQAEGEOPKKLDSEROKARKEVEEYVKKIVGESYAKS	70				
ATCC4	CbpA	trunc -IVASLVMGSVVHATENEGATQVPTSSNRANESQAEGEOPKKLDSEROKARKEVEEYVKKIVGESYAKS	69				
	- DRKHTQVALNTKLSAIKTEYLNGLSVLEEKSEAELPSEIKA --- KLDAAFEQFKKDTL -----			- DRKHTQVALNYGLLTKLGVIKTEYLHGLSVSKKSEAEKPSEIKA --- KLDAAFEQFKKDTL -----			
	80	90	100	110	120	130	140
SPB328 (23F)	CbpA	DRKHTQVALNYGLLTKLGVIKTEYLHGLSVSKKSEAEKPSEIKA --- KLDAAFEQFKKDTL -----					111
SPB365 (23F)	CbpA	DRKHTQVALNYGLLTKLGVIKTEYLHGLSVSKKSEAEKPSEIKA --- KLDAAFEQFKKDTL -----					111
SPB105 (6B)	CbpA	DRKHTQNFALNIKLSRIKTEYLRLKLNVLEEKSKAELPSETKK --- E1DAAFEQFKKDTN -----					113
SPSJ12 (19A)	CbpA	DRRKHTQNVGLLTKGAIKTEYLRLGSVSKESTAELPSEIKA --- KLTAAFKQFKKDTL -----					111
SPB331 (14)	CbpA	DRRKHTQNVGLLTKGVIKTEYLHGLSVSKKSEAEKPSEIKA --- KLDAAFEQFKKDTL -----					110
SPR332 (9V)	CbpA	DRRKHTQNLAFNMQKLSAIKTEYLGLK -- EKSEAELPSEVKA --- KLDAAFEQFKKDTL -----					106
ATCC2	CbpA	trunc DRKHTQNFANFMKLSAIKTEYLGLK -- EKSEAELPSEVKA --- KLDAAFEQFKKDTL -----					110
R6X (2)	CbpA	trun DRKHTQVALNIKLSAIKTYLRELNVLEEKSKOELPSEIKA --- KLDAAFEQFKKDTL -----					98
SPSJ9 (14)	CbpA	t DRSKHITKVNLINKQD1KRTYLYELNVLEDKSKAELPSKIKA -- ELDAAFEQFKKDTL -----					112
ATCC6B	CbpA	trun KKQHTQNADEFNKKLSKIKTYLYELNVLEEKSEAELTSKTKEELTAAFEQFKKDTL -----					113
Ntype4	CbpA	trun TKKRHTITVVALVNELLNNIKNEYLN -- KIVESTSESQALIMMERSRSKVDEAVSKFEKDSSSSSDSSTK	138				
ATCC4	CbpA	trunc TKKRHTITVVALVNELLNNIKNEYLN -- KIVESTSESQALIMMERSRSKVDEAVSKFEKDSSSSSDSSTK	137				





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FIG. 2B-1



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FIG. 2B-2

EEDRRNYPNTYKTLLELIAESDVEVKKAELLEVKEEAKESRNEEKVQAKAEVESKKAAETRLEKIKTD  
360 370 380 390 400 410 420

SPB328 (23F)	CbpA	EEDRRNYPNTNTYKTL	EELVKEEAKESRNEEKIKQVKAKVESKKAEATRLENIKTD	367	
SPB365 (23F)	CbpA	EEDRRNYPNTNTYKTL	EELVKEEAKESRNEEKIKQVKAKVESKKAEATRLENIKTD	367	
SPB105 (6B)	CbpA	EEDRRNYPNTNTYKTL	EELVKEEAKESRNEEKVNQAKAKVESKKAEATRLENIKTD	370	
SPSJ12 (19A)	CbpA	EEDRRNYPNTNTYKTL	EELVKEEAKESRNEEKVNQAKAKVESKKAEATRLENIKTD	370	
SPB331 (14)	CbpA	EEDRRNYPNTNTYKTL	EELVKEEAKESRNEEKVNQAKAKVESKKAEATRLENIKTD	361	
SPR332 (9V)	CbpA	EEDRRNYPNTNTYKTL	EELVKEEAKESRNEEKVNQAKAKVESKKAEATRLENIKTD	366	
ATCC2 CbpA	trunc	EEDRRNYPNTNTYKTL	EELVKEEAKESRNEEKVNQAKAKVESKKAEATRLENIKTD	365	
R6X (2)	CbpA	trunc	EEDRRNYPNTNTYKTL	EELVKEEAKESRNEEKVNQAKAKVESKKAEATRLENIKTD	358
SPSJ9 (14)	CbpA	t EEDHRNYPNTTYKTL	EELVKEEAKESRNEEKVNQAKAKVESKKAEATRLENIKTD	353	
ATCC68 CbpA	trunc	EEDRRNYPNTNTYKTL	EELVKEEAKESRNEEKVNQAKAKVESKKAEATRLENIKTD	363	
Ntpe4 CbpA	trunc	EEDRRNYPNTNTYKTL	EELVKEEAKESRNEEKVNQAKAKVESKKAEATRLENIKTD	370	
ATCC4 CbpA	trunc	EEDRRNYPNTNTYKTL	EELVKEEAKESRNEEKVNQAKAKVESKKAEATRLENIKTD	398	
				397	

RKKAEE - AKRKAEEEDKVKEOPQAPAPQPEKPAEOPQAPAP - PKPENPAEOPKAEKPAADQQA  
430 440 450 460 470 480 490

SPSB328 (23F)	CbpA	RKAAEEEEAKRRAAEEEDKVKEKPRAEOPPAPAPKRPENPAEPKPAEKPADQQA	437
SPSB365 (23F)	CbpA	RKAAEEEEAKRRAAEEEDKVKEKPRAEOPPAPAPKRPENPAEPKPAEKPADQQA	437
SPSB1C5 (6B)	CbpA	RKAAEEE-AKRKAEEEDVKKEKPRAEOPPAPAPKRPENPAEPKPAEKPADQQA	437
SPSJ12 (19A)	CbpA	RKAAEEE-AKRKAEEEDVKKEKPRAEOPPAPAPKRPENPAEPKPAEKPADQQA	419
SPSB331 (14)	CbpA	RKAAEEEAKRRAAEEEDVKKEKPRAEOPPAPAPKRPENPAEPKPAEKPADQQA	436
SPR332 (9V)	CbpA	RKAAEEE-AKRKAEEEDVKKEKPRAEOPPAPAPKRPENPAEPKPAEKPADQQA	432
ATCC2	CbpA	trunc RKAEEEE-AKRKAEEEDVKKEKPRAEOPPAPAPKRPENPAEPKPAEKPADQQA	425
R6X (2)	CbpA	trun RKKAAEEE-AKRKAEEEDVKKEKPRAEOPPAPAPKRPENPAEPKPAEKPADQQA	411
SPSJ9 (14)	CbpA t	RKAAEEE-AKRKAEEEDVKKEKPRAEOPPAPAPKRPENPAEPKPAEKPADQQA	423
ATCC68	CbpA	trun RKKAAEEE-AKRKAEEEDVKKEKPRAEOPPAPAPKRPENPAEPKPAEKPADQQA	437
NType4	CbpA	trun RKKAAEEE-AKRKAEEEDVKKEKPRAEOPPAPAPKRPENPAEPKPAEKPADQQA	458
ATCC4	CbpA	trunc RKKAAEEE-AKRKAEEEDVKKEKPRAEOPPAPAPKRPENPAEPKPAEKPADQQA	457



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439  
437  
439  
419  
437  
433  
427  
413  
425  
439  
460  
459

## FIG. 2B-3

EE

SPB328 (23F) CbpA EE  
SPB365 (23F) CbpA  
SPB105 (6B) CbpA EE  
SPSJ12 (19A) CbpA  
SPB331 (14) CbpA E  
SPR332 (9V) CbpA E  
ATCC2 CbpA trunc EE  
R6X (2) CbpA trunc EE  
SPSJ9 (14) CbpA t EE  
ATCC6B CbpA trunc EE  
Ntype4 CbpA trunc EE  
ATCC4 CbpA trunc EE



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CBP Truncate 483:57

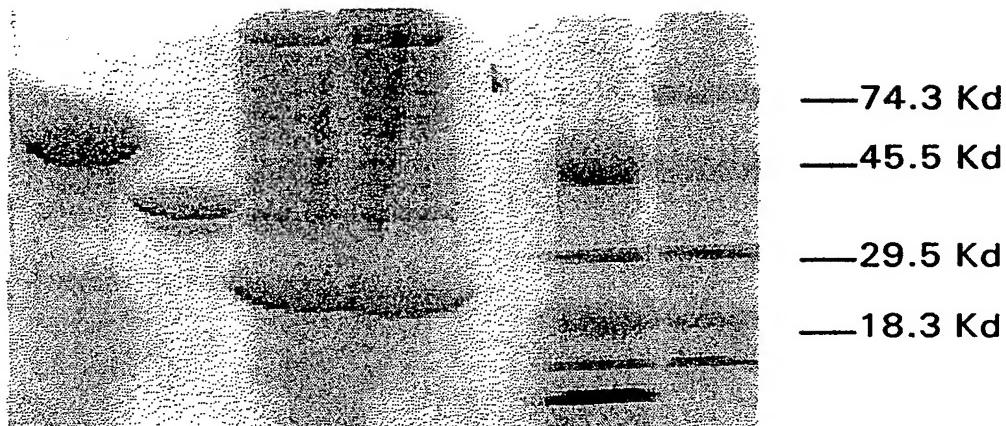


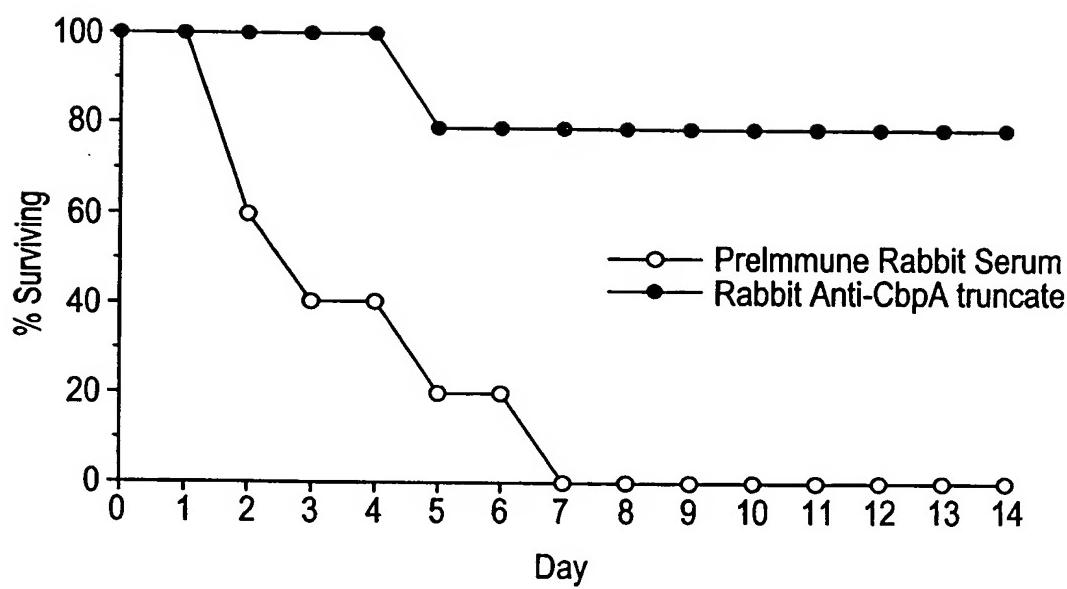
FIG. 3



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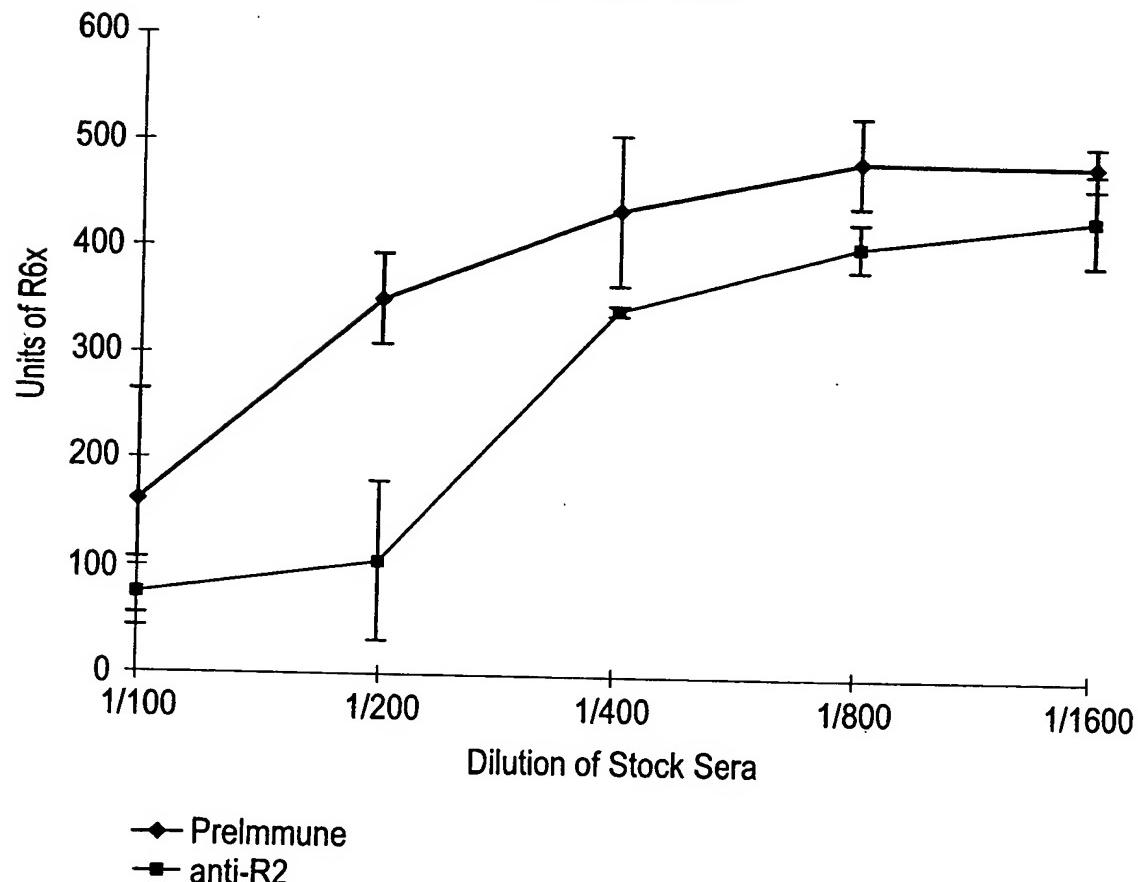
FIG. 4

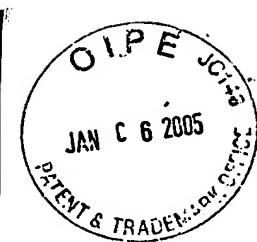




**FIG. 5**

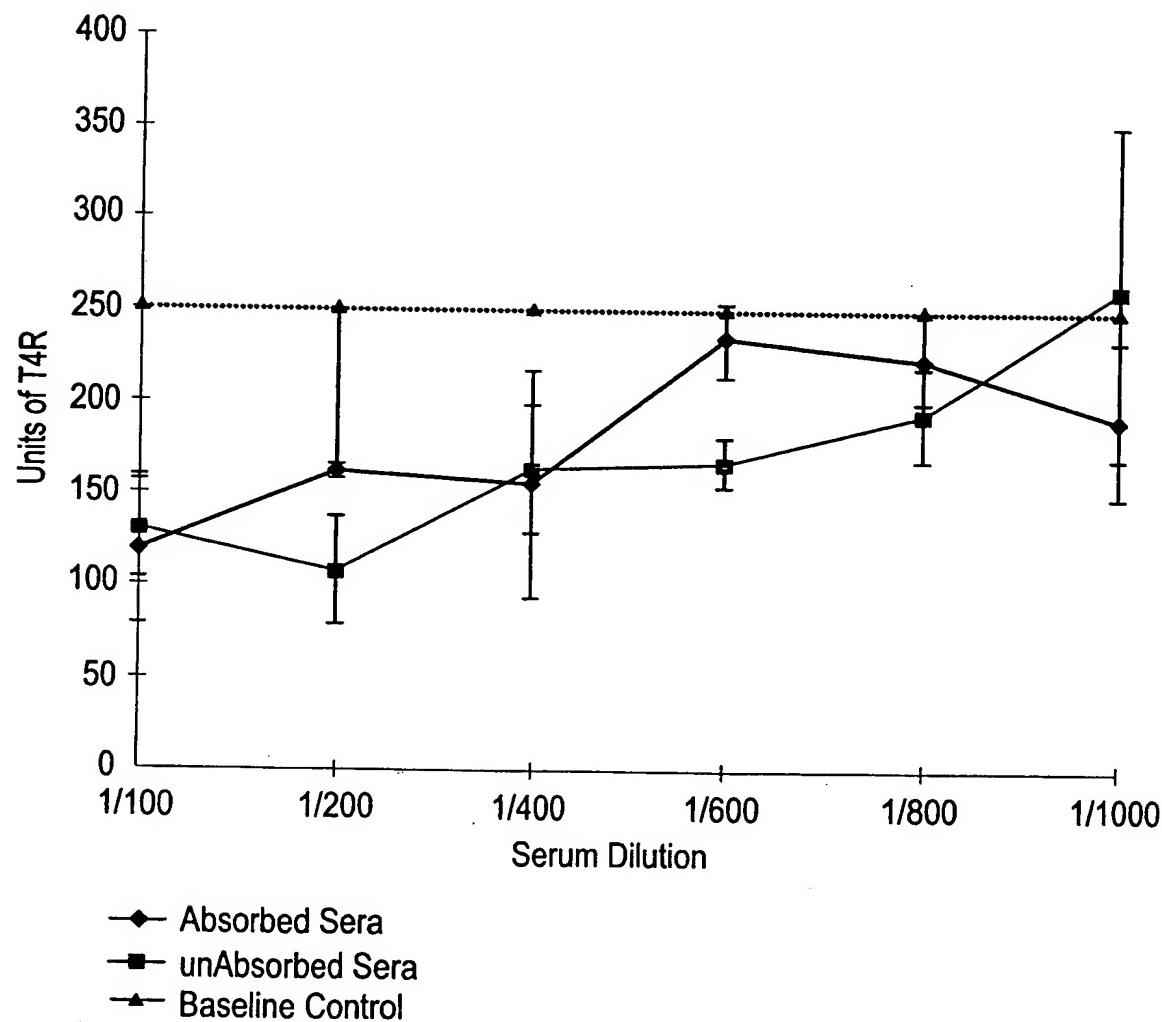
Titration of anti-R2 antibody on R6x adhering to LNnT-HSA coated plates





# FIG. 6

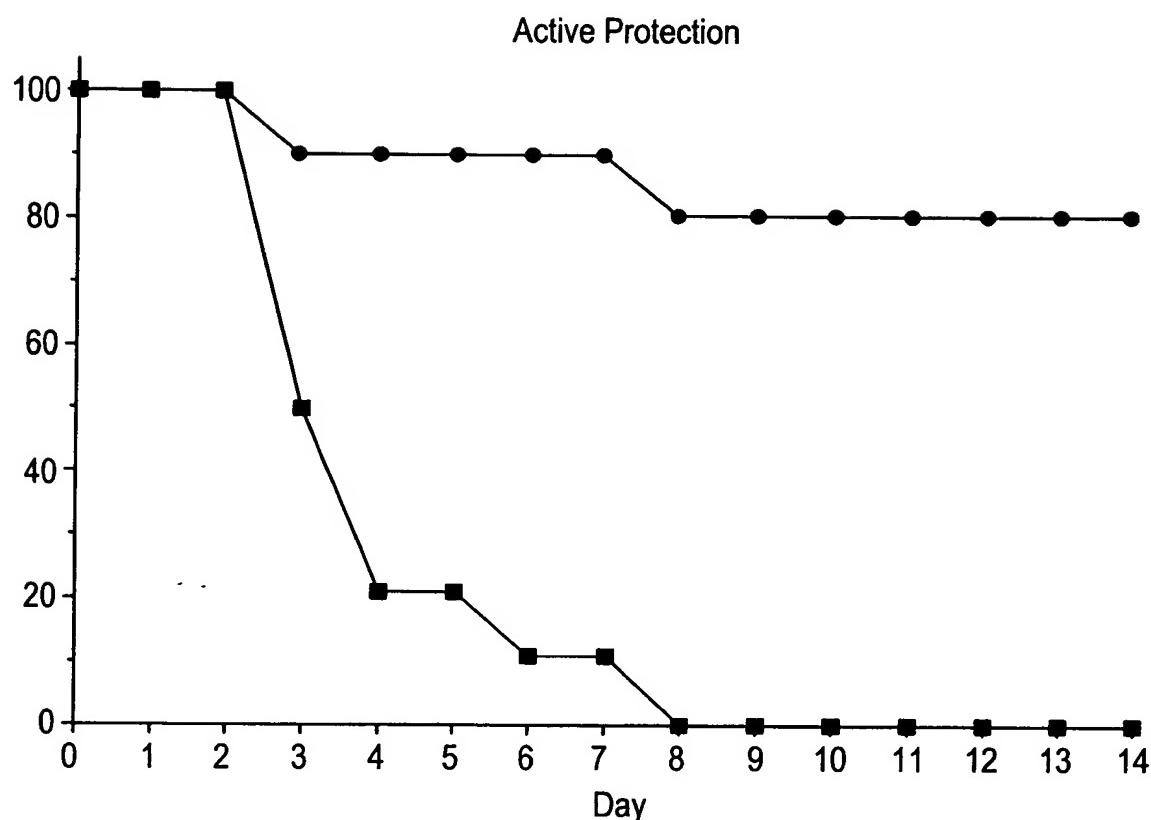
T4R Pretreated with anti-CbpA Antibody Prior to Adhesion to LNnT-HSA Coated Plates





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## FIG. 7



EPT: 4,096,000

Challenge: 560 cfu serotype 6B

n=10

- Sham
- CbpA truncate NR1X